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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/846,920	04/30/2001	Robert Brodersen	05306P030	3664

7590 10/04/2004

Glenn Von Tersch  
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EXAMINER

VAUGHN, GREGORY J

ART UNIT PAPER NUMBER

2178

DATE MAILED: 10/04/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 09/846,920	<b>Applicant(s)</b> BRODERSEN ET AL.	
	<b>Examiner</b> Gregory J. Vaughn	<b>Art Unit</b> 2178	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 30 April 2001.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-26 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-26 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 30 April 2001 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.  
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).  
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                  | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____  |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)         | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ | 6) <input type="checkbox"/> Other: _____                                    |

## **DETAILED ACTION**

### ***Application History***

1. This action is responsive to the application filing, Application filed on 4/30/2001.
2. Claims 1-26 are pending in the case, claims 1, 6, 11, 16, 17 and 22 are independent claims.

### ***Priority***

3. Applicant's claim for domestic priority of US provisional application 60/283,713, filed 4/14/2001, under 35 U.S.C. 119(e) is acknowledged.
4. Applicant mentions copending application "*Integration Objects*" on page 7, paragraph 25. Applicant is requested to amend the disclosure to provide application, name, number and filing date relating to copending applications with other priority information at the beginning of the disclosure.

***Drawings***

5. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they do not include the following reference sign(s) mentioned in the description:

- "280" on page 9, lines 19 and 21.

A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

6. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they include the following reference sign(s) not mentioned in the description:

- "245" in Figure 2B.
- "550" in Figure 5.
- "560" in Figure 5.
- "570" in Figure 5.

A proposed drawing correction, corrected drawings, or amendment to the specification to add the reference sign(s) in the description, are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

**Specification**

7. The disclosure is objected to because of the following informalities:
- The disclosure recites "*the metadata repository 280*" (page 9, lines 19 and 21). Figure 2B shows "*the metadata repository*" at reference sign 245.
  - The disclosure recites those reference signs listed in paragraph 6 above, which are not shown in the drawings.
  - The disclosure fails to disclose those reference signs listed in paragraph 7 above, which are shown in the drawings.

Appropriate correction is required.

8. The lengthy specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

***Claim Rejections - 35 USC § 102***

9. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

*"A person shall be entitled to a patent unless –*

*(e) The invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language."*

10. Claims 1-4, 6-9, 11-14, 16-20 and 22-25 are rejected under 35 U.S.C. 102(e) as being anticipated by Williams US Patent 6,591,272, filed 2/22/2000, patented 7/8/2003.
11. **Regarding independent claim 1**, Williams discloses finding a set of records of a relational database matching an instance of a component of an object. Williams recites: *"The process of interrogation of relational database schema or catalogs to obtain information pertaining to the database tables and the interrelationships between database tables is well known"* (column 2, lines 59-62) and *"user can, if so desired, easily select a subset of all possible objects represented by the databases"* (column 4, lines 60-61).

Williams discloses updating the set of records. Williams recites: *"In the prior art, one could typically update the underlying relational database (s) exclusively through the object system"* (column 3, lines 58-59).

Williams discloses inserting new records related to an existing object. Williams recites: *"For object insertions, an OSFORBStream is built in the client that contains the new attributes of the object to be inserted"* (column 14, lines 2-4).

Williams discloses recursively repeating the finding, updating and inserting with respect to children of the object. Williams recites: *"The records returned would have been appended to the "raw" OSFORBStream and the process repeated until all subtables associated with the child object were read. This generalized model works for all table interrelationships, no matter how many foreign keys, primary keys or tables are involved in the creation (or insertion, update and delete) of the PRO-OBJECT"* (column 73, lines 44-51).

12. **Regarding dependent claim 2**, Williams discloses deleting records related to the object. Williams recites: *"The present invention also relates to a method of communication removal existing objects from client computers so as to delete the rows of the appropriate tables in the corresponding databases in transactional mode"* (column 5, lines 39-42).

13. **Regarding dependent claim 3**, Williams discloses the use of users keys related to the object instance. Williams recites: *"Further, validation of a sequence number, client IP address, client hostname and timestamp is performed on each received*



session security token before the username contained therein is used for an access check" (column 19, lines 15-19).

14. **Regarding dependent claim 4**, Williams discloses the use of SQL. Williams recites: "Pseudo-objects are then produced by dynamic generation and execution of pre-optimized SQL, enveloping values that result from execution of the generated prepared SQL statements" (column 5, lines 2-5).
  15. **Regarding independent claims 6, 11, 16, 17 and 22**, the claims are directed toward a method, apparatus, method, machine-readable medium and a system (respectively) for the method of claim 1, and are rejected using the same rationale.
  16. **Regarding dependent claims 7, 12, 18 and 23**, the claims are directed toward a method, apparatus, machine-readable medium and a system (respectively) for the method of claim 2, and are rejected using the same rationale.
  17. **Regarding dependent claims 8, 13, 19 and 24**, the claims are directed toward a method, apparatus, machine-readable medium and a system (respectively) for the method of claim 3, and are rejected using the same rationale.
- 
18. **Regarding dependent claims 9, 14, 20 and 25**, the claims are directed toward a method, apparatus, machine-readable medium and a system (respectively) for the method of claim 4, and are rejected using the same rationale.

***Claim Rejections - 35 USC § 103***

19. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

*(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.*

20. Claims 5, 10, 15, 21 and 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Williams in view of Cseri et al. US Patent 6,708,164, filed 3/17/2000, patented 3/16/2004.

21. **Regarding dependent claim 5**, Williams discloses recursively finding, updating, inserting and deleting records of a relational database as described above. Williams fails to disclose cascaded deleting. Cseri teaches the use of cascaded deleting. Cseri recites: *"if a relational schema provides information about cascading delete constraints, then the cascading delete constraints is taken to indicate nesting. In a relational system, a cascading delete constraint permits specifying that children of a parent are automatically deleted, if the parent is deleted"* (column 7, lines 13-18).

Therefore, it would have been obvious, to one of ordinary skill in the art at the time the invention was made to use cascaded deleting as taught by Cseri with the data translation invention of Williams in order *"for information exchange among*

*networked applications and the continuing and increasing use of relational database systems for managing businesses"* (Cseri, column 1, lines 14-16).

22. **Regarding dependent claims 10, 15, 21 and 26**, the claims are directed toward a method, apparatus, machine-readable medium and a system (respectively) for the method of claim 5, and are rejected using the same rationale.

**Conclusion**

23. The following prior art made of record and not relied upon is considered pertinent to applicant's disclosure:

<u>Patent/Publication</u>	<u>Date</u>	<u>Inventor</u>
• US-5,887,171	03-1999	Tada et al.
• US-6,499,026	12-2002	Rivette et al.
• US-6,449,627	09-2002	Baer et al.
• US-6,560,592	05-2003	Reid et al.
• US-6,578,056	06-2003	Lamburt, Leonid
• US-6,601,057	07-2003	Underwood et al.
• US-6,636,242	10-2003	Bowman-Amuah, Michel K.
• US-6,697,825	02-2004	Underwood et al.
• US-6,704,804	03-2004	Wilson et al.
• US-6,708,164	03-2004	Cseri et al.
• US-6,769,124	07-2004	Schoening et al.
• US-2002/0049788	04-2002	Lipkin et al.
• US-2002/0138353	09-2002	Schreiber et al.
• US-2003/0023580	01-2003	Braud et al.

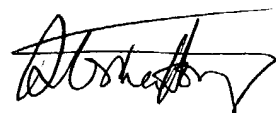
24. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Gregory J. Vaughn whose telephone number is (703) 305-4672 (after 10/12/2004 use (571) 272-4131). The examiner can normally be reached Monday to Friday from 8:00 am to 5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stephen S. Hong can be reached at (703) 308-5465 (after 10/12/2004 use (571) 272-4124). The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306 (after 10/12/2004 use (571) 272-2100).

Art Unit: 2178

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Gregory J. Vaughn  
September 13, 2004

A handwritten signature in black ink, appearing to read 'S. Hong', with a stylized flourish at the end.

**STEPHEN S. HONG**  
**PRIMARY EXAMINER**